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# Measuring the Quality of Care in Nursing Homes: a Pilot Study in Wisconsin

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DEVisING AN INSTRUMENT TO MEASURE the quality of long-term care accurately and reliably has been difficult. The difficulty lies in the fact that there is no single definition for quality of care, no absolute standard, and hence, no simple method of measurement. The definition used and the standards that are applied must therefore be based on opinion. And because the interested parties—the care providers, patients, government officials, and consumer groups, to name a few—are the ones who decide what quality of care consists of in a given situation and whether it is “good” or “bad,” the outcome of the evaluation will often depend on who is making the judgment.

The problem, then, becomes one of bringing consistency and meaning to the evaluation process itself. One solution is to observe the judgment process and harness it in a careful and controlled manner. And, indeed, several models have been designed to structure it. One is the multiattribute utility (MAU) model (1), which is based on the assumption that most judgments are multidimensional and that different dimensions should have different degrees of importance in influencing decisions.

A model based on these assumptions has been used

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in several settings to measure the effectiveness of a given process (2). The first, and apparently the only application of this model to evaluating a health delivery unit's quality of care, was done by Huber and associates (3). The results suggested the model's potential, but no implementation took place. In the study reported here, MAU techniques were applied in a demonstration project involving 170 nursing homes. This model is being tested in these homes with a view to possible statewide adoption.

Evaluating the quality of long-term care entails all the difficulties of definition, standards, and measurement attendant upon the evaluation of quality of care in general, with other difficulties as well. For one thing, the study of what makes for effective long-term care still is evolving, and there is some disagreement yet about what the purpose of long-term care is or should be. For example, the question remains unsettled as to whether emphasis ought to be placed primarily on the health care of patients, as has traditionally been done, or on both health and social care (4). And since there is not complete agreement on this basic issue, it becomes difficult even to define long-term care and doubly difficult to determine what is and is not good-quality long-term care.

Observers of nursing homes in the United States have long noted the existence of problems both in the delivery of long-term care and in the systems monitoring that care. These problems have been well documented and publicized. Reports by the Department of Health, Education, and Welfare's Office of Nursing Home Affairs, the New York State Moreland Act Commission, the Wisconsin Medicaid Management Study Team, and the U.S. Senate Subcommittee on Long-term Care (5-9), to name but a few, all document the shortcomings of the present long-term-care system. Add to these reports of inadequate care the accusations about windfall profits being reaped by nursing home owners, and it is not

surprising that there has been strong governmental reaction in the form of attempts to strictly control nursing home care. In Wisconsin alone, State and Federal regulations aimed at regulating nursing homes number more than 1,500.

But the regulations themselves have engendered difficulties. For one thing, the number of regulations has grown steadily, making it difficult and sometimes financially unfeasible for those engaged in long-term care to keep abreast of the changes being made. Critics attack this burgeoning legal structure for being unnecessarily redundant—and have reason for doing so. The Wisconsin Medicaid Management Study Team, for example, concluded that 40 percent of the current State and Federal regulations relating to nursing homes were duplicative (8). This means that the mandated annual facility survey, which is based on a checklist of 1,500 State and Federal regulations, involves approximately 620 regulations that unnecessarily duplicate other regulations or require collection of information from the survey that could be obtained more conveniently from another source—from the most current license application, for example. The result is an unnecessary increase in the workload of those charged with surveying nursing homes as well as confusion on the part of nursing home administrators.

The annual facility survey, aimed at identifying problems in the nursing home facility itself, and the independent medical review, which concentrates on medical problems, both come under attack because of the time and expense necessary to carry them out. This two-part evaluation process, which many States use, can take from 2 to 3 weeks in a 100-bed home. Its cost in Wisconsin alone is \$3.5 million annually.

The facility survey has been further criticized because it does not sufficiently discriminate between homes that deliver good care and those that do not, so that a facility survey team expends the same amount of time on both. Perhaps the time and expense would be justified if the survey served as a mechanism for keeping poor-quality homes from entering the certification and reimbursement system or as a mechanism for improving care in those nursing homes that were already certified, but such is not the case. In spite of the facility survey, homes providing inadequate care continue to be licensed. A hearing of the Senate Subcommittee on Long-Term Care in 1971 found that 74 percent of all nursing homes participating in the Medicare program had been certified with deficiencies. In fact, Department of Health, Education, and Welfare (DHEW) statistics indicate that between 1968 and 1971 more than 70 percent of the Medicare-certified homes had deficiencies (9).

Another major problem is that with the survey mechanisms being used, the kind of care patients in nursing homes receive simply cannot be evaluated. The Department of Health, Education, and Welfare, source of many of the regulations used in the annual facility survey, sounded a warning concerning this inadequacy. In a report to the Senate Special Committee on Aging, the Department noted that its own national nursing home improvement survey documented that “present regulations for survey and certification procedures only confirm whether or not the facility is capable of delivering the required services, not whether or not the facility has implemented them or whether quality care has actually been administered” (10). In other words, the emphasis has been on compliance with carrying out the letter of the law rather than on implementing the law’s intent, which is to insure that quality nursing care is delivered.

Because of general dissatisfaction with the present method of evaluation of nursing homes, several attempts to improve the system have been undertaken. The State of Washington made one of the first of these attempts (11). Washington State surveyors reviewed the Federal regulations to determine their basic intent, selected the five most important dimensions from the Federal list, and then devised a comprehensive survey instrument that included a process for determining whether a home was meeting the intent rather than the letter of the regulations. This instrument was in use for a limited time only. One problem with such an approach is that, like the Federal regulations, it focuses on the facility rather than on the care actually being received by the patient.

DHEW’s patient appraisal and care evaluation (PACE) instrument (12) is another attempt to improve the present system. Instead of concentrating on the facility’s capability to provide care, PACE focuses on the patient, periodically measuring the patient’s medical, dental, nutritional, and psychosocial needs. After each evaluation, time-limited goals are set for each patient for whatever improvements need to be made. Progress is gauged and continuity assured by reevaluations.

The difficulty with the original PACE instrument was that it was 18 pages long. Also, when it was tested for feasibility, it was found to give too much emphasis to medical and functional needs. Moreover, because the instrument was used in addition to the present facility survey system, it was open to criticism that it was adding yet another form to those already in use and yet not evaluating the care delivery systems of nursing homes.

In a quality evaluation system (QES) (13) developed by Rush-Presbyterian-St. Luke's Medical Center and the Medicus Systems Corporation in Chicago, attempts are made to cover both the patients' needs and the facility's resources. Data on these two areas are collected by a team whose two members interview two randomly selected staff members, 10 percent of the facility's residents, and the staff members providing care for those patients who are interviewed. A random sample of patients' medical records are reviewed, and a questionnaire is completed by the nursing home administrator. The data are then translated by computer into a 3-page QES report in which each facility's performance is rated on a percentile basis. In the QES approach, both patient care and facility resources are covered, and attempts are made through sampling techniques to eliminate some of the unnecessary time spent on the reviews. However, the same amount of time is still spent on the good homes as on those needing improvement.

The Joint Commission on Accreditation of Hospitals (JCAH) has devised a patient-oriented evaluation instrument that is based on the idea that it is possible "to predict the outcomes that patients should achieve with optimal care" (14). A four-part patient-care profile is used to assess a patient's status on entering a nursing home; then within 2 weeks, goals are established for the resolution of the problems revealed. Once the goals have been determined, approaches to the problems and to treatments are set by the staff, who are also responsible for recording the patient's progress. A review of progress is carried out at 6-month intervals, and a record is made of whether each of the goals in patient care has been achieved and the reasons for any failure. In addition, a new plan for the future is made. Unfortunately, this approach is time consuming and does not take the facility's characteristics into account.

Although all of the approaches mentioned afford some improvement over the old system, none completely solves the two major defects of that system, namely, (a) the excessive time and money spent in evaluating nursing homes without consideration of the fact that some homes warrant more time and others less and (b) the emphasis on compliance with the letter of the law rather than on implementing its intent. These approaches result in evaluation of a nursing home's ability to satisfy regulations instead of promoting real improvement in the way care is delivered.

### **The Wisconsin System**

As in most other States, Wisconsin's system of evaluating nursing home care has been based primarily on an

expensive and time-consuming facility survey and a review of patients' medical records. Aware that the Senate Subcommittee on Long-Term Care and other investigative bodies had found that such a system does not adequately measure the quality of care in nursing homes, Wisconsin funded a quality assurance project to devise a system that would accurately determine a home's ability to deliver good quality care and also make it possible to improve care whenever that was needed.

One of the biggest problems with the combined facility survey-medical review system is that it inefficiently allocates resources; that is, the same amount of time is spent on nursing homes that perform well as on those that do not. To overcome this problem, it was decided that a facility screening instrument was needed that would enable quality assurance staff to determine quickly and inexpensively whether a nursing home was delivering good quality care and to decide if changes should be made to improve quality.

Screening is the cornerstone of the new approach. This new approach permits flexibility to be built into the system by making it possible to spend more time on those homes needing attention and less on those that do not and by providing a mechanism for bringing about positive change.

### **Development of the Model**

A multiattribute utility model was the basis for the screening model that was developed. A critical step in the construction of the screening model was selecting the factors to go into it. The first step in the process was therefore to define quality of care with respect to geriatric nursing home residents. To do so, a panel composed of respected professionals from the nursing home industry, the State surveying agency, academia, and consumer advocacy groups was convened. Each member of the panel, 20 members in all, had been asked previously to describe the components that he or she believed to be essential to quality care in a geriatric setting. The lists of these quality components were summarized to form a composite model, which was then presented at the meeting. At the meeting, the model was defined, and examples were added to indicate acceptable and unacceptable performance on each of the criteria listed. For example, under the criterion having to do with the facility itself, the panel agreed that an indicator of quality in that category was seeing mementos of residents' experiences in their rooms instead of only institutional furniture and accessories. The panel was also asked to weight the relative importance of each component of the 11 criteria in the final model.

## Criteria Selected for Model

The 11 criteria that the panel identified for evaluating quality of care, as well as examples of what constitutes good and bad quality under each criterion, are listed in the table. To illustrate, let us take one major criterion, "Residents' condition." Six indicators of quality are listed for it: grooming (example: shaven, manicured versus unkempt); odor (example: no offensive smells versus body or urine odor); clothing (example: day clothes versus pajamas); mood (examples: happy versus glum, open versus afraid to talk); awareness (example: alert versus signs of excessive drug intake); and physical condition (example: no bed sores versus bed sores, excessive numbers of catheters versus moderate number).

Each criterion has a set of components that were assigned weights. These weights, which in the table appear to the right of the respective component, reflect the importance of each component within each criterion.

Judgments on the criteria were to be made by survey staff based direct observation, discussion with nursing home residents and staff, or both. The financial condition of the facility, for example, might be assessed by checking to see if the home was cutting corners by skimping on food, supplies, or personnel. The residents' physical condition could be ascertained by observation, talking with residents about their treatment, and discussing their treatment with knowledgeable nursing home staff.

With the nursing home review model as a basis, forms were created to guide the professional State survey staff when they visited a home. The model gives the survey staff the option of approving a home, suggesting consultation, or collecting more information on it. Such decisions can be made about the nursing home as a whole or about parts of its operation. For instance, the facility might be approved in all but two areas. If one of the two that was not approved was "residents' condition," consultation with the staff might be scheduled to discuss, for example, the residents' grooming. The other area for further consideration might be "dietary" if the survey staff found long delays in meal distribution but needed to document those delays and identify the cause before taking action.

The actions chosen to correct similar problems in different homes might vary. The determining factor would be the probability that a program would be corrected by the planned intervention. In each situation, a number of alternatives to bring about change are available, ranging from consultation with the nursing home staff to involvement of community volunteers or pressure groups. One advantage of the new system is

that it encourages the use of a number of different levers less drastic than decertification to bring about needed changes.

## Pilot Study

Five teams of two people, all with nursing home expertise, were convened to pilot-test the model. Eight persons were from the nursing home industry; two were members of the State survey process; five were registered nurses; and five had backgrounds in recreational or occupational therapy. All were known as leaders in their fields. Nine nursing homes agreed to open their doors to this group of judges—six proprietary homes, two church-affiliated homes, and one municipal home.

The field test judges were paired so that each of the five teams consisted of one activities person and one nurse. One person on each team also had experience in nursing home administration.

The five teams spent a full day reviewing and making final revisions in the nursing home review model and discussing the indicators of quality to be looked for in each home being surveyed. All five teams spent the morning of the second day evaluating the same home together, using the survey instrument. Results of the experience were then discussed, and modifications were made in the evaluation process. The next 3 days were spent evaluating eight other homes. Approximately 2 hours were spent in each home.

The administrator of the nursing home first met with the teams and answered the questions raised by the team members. The teams next toured the facility. During this time the screening instrument served as a guide for investigation. After the tour, team members individually filled out the screening questionnaire as best they could and then shared their partially completed questionnaires with the other team members. When consensus did not exist and questions on the instrument could not be answered, the team members collected the necessary data by returning to the appropriate places in the nursing home. Discussion was encouraged between members of the same team; however, discussion was prohibited among teams.

Part of the final day was spent suggesting revisions in the evaluation procedure. In addition, each team provided a general assessment of the relative quality of care provided by each of the homes. This assessment was in addition to the assessment done with the screening instrument. All the surveyors from all the survey teams were given a list of the nine homes visited. Each surveyor then individually ranked the homes in the order of the general quality of care delivered and assigned 100 to the "best" home and weights between 0 and 100 to the other homes. The weights were assigned so as to reflect the relative quality of those other

Components of the 11 major criteria in the facility screening model, with examples of each component and with the weight assigned to it

<i>Major criteria and criteria components with examples</i>	<i>Weight assigned</i>
<b>Philosophy</b>	
Environment (home versus institution) . . . . .	20
Residents' care (caring, curing versus warehousing) (total needs versus medical only) . . . . .	23
Residents' influence on administrative decisions (input versus no input) . . . . .	10
Importance of community (encouragement of community involvement in home versus not encouraging it) . . . . .	6
Importance of visiting (encouragement of family and inter-resident visiting versus not encouraging it) . . . . .	6
Objectives (giving good care versus cutting corners wherever possible to save money) . . . . .	15
Residents' strength and abilities (fostered versus ignored) . . . . .	20
<b>Management</b>	
Administrator and director of nurses knowledgeable about resident population's needs . . . . .	30
Focus of policies (residents' benefit versus staff benefits) . . . . .	30
Financial management (stable versus in trouble) (sufficient supplies, equipment versus insufficient supplies, equipment) (appropriate versus inappropriate resource allocation) . . . . .	25
Attitude regarding staff (knowledgeable about staff activities versus not knowledgeable) . . . . .	15
<b>Care management</b>	
Plan of care (everyone, including residents, involved versus only nurses) (goals appropriate versus inappropriate) . . . . .	30
Records system (meaningful versus routine) (self-helpful versus only to meet regulations) . . . . .	8
Residents' medical analysis (up-to-date versus obsolete diagnosis and orders) . . . . .	20
Aides taking residents walking, checking their restraints, assisting in eating, and so forth versus none of these things . . . . .	10
Evaluation of residents (periodic versus none) . . . . .	20
Orientation program for residents upon admission (program versus no program) . . . . .	12
<b>Resident-staff relationships</b>	
Staff knows residents (knows who residents are versus knows their names only) . . . . .	40
Residents' rights respected (privacy respected versus privacy not respected) (treated as human beings versus not so treated) . . . . .	60
<b>Residents' condition</b>	
Grooming (shaven, manicured versus unkempt) . . . . .	20
Odor (no offensive smells versus body or urine odor) . . . . .	15
Clothing (day clothes versus pajamas) . . . . .	10
Mood (happy versus glum) (open versus afraid to talk) . . . . .	20
Awareness (alert versus signs of excessive drug intake) . . . . .	15
Physical condition (no bed sores versus bed sores) (excessive number of catheters versus moderate number) . . . . .	20
<b>Activities</b>	
Communication between residents (interaction fostered by activities versus inhibited) . . . . .	15
Variety of activities (many activities versus television and bingo only) . . . . .	25
Residents' capabilities and needs matched to activities (geared to residents versus not geared to residents) . . . . .	25
Volunteers (active versus small role) (trained versus untrained) . . . . .	10
Residents' participation (have choice versus have no choice) . . . . .	25

homes. The surveyors were not permitted to discuss their judgments with each other at any time. The ratings from both surveyors were then averaged within teams to give a team score to each home. This general assessment was used later to test the strength of agreement among the evaluating teams.

**Testing of Model**

The evaluation of judgmental models is difficult. There hardly ever are any firm measures of effectiveness because the models attempt to prescribe judgments. If the values suggested by the models differ, for instance, from the judgments made by experts, one might conclude that the model was wrong. Or one might also

conclude that the task was too complex for judges to perform properly, and so the judges were wrong. The typical method for evaluating judgmental models is by a process of convergent validity, that is, to look at performance in several ways in order to discover whether the same conclusion is reached. In this pilot study, the performance of the model was evaluated in three ways (evaluation Nos. 1, 2, and 3):

1. General assessments of nursing home quality were correlated with the value assigned by the screening model. Strong agreement would indicate that the screening model replicated the judgments of a team of respected surveyors.
2. Screening model ratings were correlated among

Components of the 11 major criteria in the facility screening model, with examples of each component and with the weight assigned to it—Continued

<i>Major criteria and criteria components with examples</i>	<i>Weight assigned</i>
<i>Safety of facility</i>	
Outside maintenance (safe versus overgrown grounds) (neat versus messy) (snowy versus shoveled walks) . . . . .	10
Residents' rooms (beds made versus unmade) (personal mementos versus institutional) . . . . .	15
Floor plan (spacious versus cramped) (efficient versus lack of or wasted space) . . . . .	5
Safety (facility and furnishings meet code's intent versus dangerous) . . . . .	20
Cleanliness (facility clean versus clean in visitors' area only) (odor-free versus odors present) . . . . .	20
Maintenance (plant and equipment well maintained versus need repair) . . . . .	15
Evidence of disaster preparedness (staff knows exit patterns versus does not know them) . . . . .	15
<i>Staff</i>	
Number (sufficient versus insufficient) . . . . .	20
Credentials (appropriate training versus poor qualifications) . . . . .	15
Inservice education (active versus not active) (academically inquisitive versus not academically inquisitive) . . . . .	10
Mood of staff (self-critical versus defensive) (critical versus supportive) . . . . .	15
Attitude toward administration (critical versus supportive) . . . . .	5
Appearance (neat, clean versus sloppy, dirty) . . . . .	10
Objectives (interest in improving versus just doing job) (own goals versus no goals) . . . . .	15
Communication (evidence of communication among interdisciplinary staffs versus no evidence of such communication) . . . . .	10
<i>Ties to community</i>	
Religious (ties to residents' home churches versus no such ties) (bedside services versus none) . . . . .	20
Volunteering by residents (active versus little role) . . . . .	25
Ties to community (get to town, community brought in versus no such ties) . . . . .	10
Ties to family (aggressive attempt to involve family versus no attempt) . . . . .	20
Continuity of lifestyle (residents can retain some of old lifestyle versus having new lifestyle imposed) . . . . .	25
<i>Resident population</i>	
Mix of residents with special needs (several of residents with special needs put together versus isolation of such residents) . . . . .	25
Handling of problem residents (transferred if necessary versus keeping them forever) . . . . .	35
Appropriateness of placement (appropriate versus inappropriate) . . . . .	40
<i>Professional ties</i>	
Physician(s) (involved versus uninterested) (home tries to involve physician versus not attempting to) . . . . .	50
Transfer of information from local hospitals to home (data transferred versus not transferred) . . . . .	20
Transfer of information to other institutions (data transferred versus not transferred) . . . . .	15
Ancillary personnel, therapists, and other support staff (involved versus not involved) (attempt made to insure staff continuity versus no such attempt) . . . . .	15

teams. High correlations would suggest that the model was being reliably applied by several different groups.

3. Screening model ratings were correlated with the number of deficiencies cited in the home during the most recent standard survey. Since the screening process had been developed as an alternative to what was considered an ineffective system, this correlation was expected to be poor.

Before the teams' ratings were compared with the general assessment (evaluation No. 1), it was important to know if the teams agreed in their general assessments. Kendall's coefficient of concordance among the rankings of the five teams was 0.80. This result suggested that the average general assessments could be corre-

lated with the screening model ratings. It seemed, therefore, that the average general assessment could be used as one standard of comparison for the screening approach. The correlation between the screening rating and the general assessment was calculated for each survey team with the following results:

<i>Team No.</i>	<i>Correlation with general assessment</i>
1 . . . . .	0.52
2 . . . . .	0.79
3 . . . . .	0.82
4 . . . . .	0.91
5 . . . . .	0.75
Average . . . . .	0.76

The reliability of the screening process (evaluation No. 2) was estimated by averaging the scores that all teams gave to each indicator in the screening model; then these scores were used to calculate a composite model rating. An example might help clarify this process. Suppose that for the indicator "grooming" within the "residents' condition" criterion, four of the five teams scored nursing home A as acceptable and the fifth team advised consultation. An acceptable rating was assigned a value of 2, consultation was assigned a value of 1, and investigation was given a value of 0. So, in this example, the composite score was  $(2+2+2+2+1) \div 5 = 1.8$ . These scores were weighted as shown in the table on pages 340-341 and summed to yield a composite model rating. Reliability was tested by correlating that composite rating with the screening model ratings calculated from the score of individual teams. The results follow.

<i>Team No.</i>	<i>Correlation with composite screening model ratings</i>
1 .....	0.71
2 .....	0.77
3 .....	0.87
4 .....	0.88
5 .....	0.69
	0.78
Average .....	0.78

The correlation (evaluation No. 3) between the screening model scores and the number of deficiencies cited in the most recent State survey was the next indicator of agreement. The report from the previous survey was examined to find the number of deficiencies cited. Deficiencies could be cited more than once in a report, but when this happened, the deficiency was counted only once. The correlation between the composite screening and the number of deficiencies cited was 0.53. This statistic is significant at the 0.10 level, a result suggesting that a moderate relationship exists.

A similar correlation was run comparing the number of deficiencies and the average general rating. The correlation was 0.11.

## Conclusions

The results of this pilot study are encouraging. They suggest a significant amount of inter-team reliability and also show that the screening model correlated well with the general assessments. The high (0.80) correlation among the teams' general assessments suggests that there was a "common wisdom" among the surveyors. The low to moderate correlation in the number of deficiencies found between the existing State survey and the screening model may demonstrate that the two are measuring different things—a desirable attribute since

the new screening process was designed to correct problems in the earlier survey process.

However, all these conclusions must be tempered, since there were weaknesses in the pilot study itself. First, only nine homes were visited—a small sample size. Second, the five teams visited the homes at the same time. Also, although the teams were instructed not to share their observations, some limited sharing possibly did take place. Finally, the homes were warned in advance that the visit would be made. The homes could, therefore, have prepared for the visit by changing the conditions found in the old survey. It is also possible that deficiencies could have been corrected in the time between the State survey and the testing of the screening model. Both of these circumstances could have biased the results. Our experience with the homes however, suggests that little preparation took place in anticipation of the visit by the pilot study participants. Moreover, when the screening model results were recently compared informally with the impressions of the surveyors who had conducted State surveys in the same facility, the surveyors indicated that the problems identified during the screening were consistent with their own impressions—impressions that they could not communicate in the old survey process.

The Federal Government has given Wisconsin a waiver to demonstrate the screening process described here in a controlled randomized experiment in 165 nursing homes located in both urban and rural areas of the State. The 2-year study, now underway, involves a comparison of the new system with the traditional systems and includes 125 rural homes and 40 urban homes. Upon completion of this study in the fall of 1980, the results of both approaches will be analyzed and compared. Based on the success of the pilot study, we hypothesize that the approach used in the field study will result in a demonstrable improvement in the quality and appropriateness of the care of nursing home residents. This hypothesis rests on the following premises:

1. The screening process will free the surveyors' time for an intensive review of problems where they occur. Surveyors will have a better chance to pinpoint problem areas and establish meaningful plans for correcting them than the current system of review provides.

2. With the flexibility to reallocate resources, surveyors will be able to call in specialists, such as recreational therapists, pharmacists, psychiatrists, or occupational therapists, and thus achieve a more efficient and effective review of the home's care delivery system. Also, with more time freed, surveyors will be able to provide advice and consultation—which, under the present system they cannot do.

3. Surveyors will be able to monitor more closely a home's progress in achieving proposed changes.

4. If homes demonstrate an unwillingness to correct conditions that adversely affect the quality of care or the quality of life, time will be available to pursue enforcement actions.

Certainly if unlimited resources were available, every home could receive the consultation needed or the enforcement action deserved. Since, however, the State's resources are limited, the State must make use of them in the most efficient and effective manner. The screening process described may be one step toward an allocation of resources that will improve the quality of long-term care.

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## SYNOPSIS

GUSTAFSON, DAVID H. (University of Wisconsin), FISS, CHARLES J., JR., FRYBACK, JUDY C., SMELSER, PEGGY A., and HILES, MARY E.: *Measuring the quality of care in nursing homes: a pilot study in Wisconsin. Public Health Reports, Vol. 95, July-August 1980, pp. 336-343.*

The traditional method of evaluating nursing homes, which relies on State and Federal regulations, does not ensure quality care for nursing home residents. This fact led the Wisconsin State Department of Health and Social Services to fund a project for the development of a system that would permit rapid and reliable assessment of the quality of care given by nursing homes, permit the identification of specific problem areas, and suggest whether more in-depth

investigation was needed. A cornerstone in that system was to be a screening instrument that would quickly determine where the care delivery system in a nursing home was breaking down so that resources could be focused on these problem areas.

Eleven quality of care criteria to be used in the screening instrument were drawn up by a panel of experts. The instrument itself was then tested in nine Wisconsin nursing homes. Five teams of people with nursing home expertise (two persons per team) used the screening instrument to evaluate each of the homes. Another team, visiting the same homes, used a second screening instrument based on State and Federal regulations to evaluate the homes. Finally, without relying on any survey instru-

ment, all of the teams did a general assessment of the homes. The purpose of this general assessment was to ascertain if a "common wisdom" exists among experts in the field. The results of the teams' evaluations using both instruments were compared with each other, as well as with the results of the general assessments and the results of the most recent standard survey. This analysis showed that there was a significant amount of inter-team reliability among the teams using the new screening model and, also, that the new screening model correlated well with the general assessments.

The model is being tested further in a 2-year study of 170 nursing homes in urban and rural parts of Wisconsin.